(c) A rough estimate indicates a reserve of 14 billion tonnes of oil shale alongwith associated coal in the North-east region. However, detailed geological and geochemical investigations would be necessary to establish the reserves to a degree of certainty.

Joint collaboration in the field of technology development

159. SHRI S. MADHAVAN: Will the Minister of of PETROLEUM AND CHEMICALS be pleased to state:

(a) whether there is any proposal under Government's consideration to encourage the participation of foreign companies in the technology development programmes in the field of petro-chemicals and refining;

(b) if so, what are the details thereof; and

(c) what are the foreign companies which have come forward for such joint operations?

THE MINISTER OF PETROLEUM AND CHEMICALS AND PARLIAMENTARY AFFAIRS (SHRI SATYA PRAKASH MALAVIYA): (a) to (c) Discussions with a few foreign companies are in preliminary stage, for participation in the development of basic engineering, technology programme etc. in the petro-chemicals field.

There is a proposal for obtaining technical assistance from multinational oil companies on a centralised basis for all the oil refineries in the country, on payment of a retainer fee, and specified man-hour rates as may be necessary. This will enable refineries to keep abreast of the procedures and techniques being followed else wherein the world in the field of energy conservation, safety, optimisation for improving the yield pattern, and also in developing new projects for optimum utilisation of facilities.

Survey for granting petroleum dealerships and LPG agencies in Andhra Pradesh

160. DR. YELAMANCHILI SIVAJI: Will the Minister of PETROLEUM AND CHEMICALS be pleased to state:

(a) whether any survey has been made in the recent past for the grant of petroleum dealership and L.P.G. Agencies in Andhra Pradesh; and

(b) if so, what are the details thereof?

THE MINISTER OF PETROLEUM AND CHEMICALS AND PARLIAMENTARY AFFAIRS (SHRI SATYA PRAKASH MALAVIYA): (a) and (b) The information is being collected and will be laid on the Table of the House.

Changes in flight schedules of IA and Vayudoot

161. DR. YELAMANCHILI SIVAJI: Will the Minister of CIVIL AVIATION be pleased to state the details of changes in flight schedules of Indian Airlines and Vayudoot during the last three years, yearwise and the justification therefor?

THE MINISTER OF STATE OF THE MINISTRY OF CIVIL AVIATION (SHRI HARMOHAN DHAWAN): The number of times, flight schedules of Indian Airlines and Vayudoot have been changed during the last three years, is as under:—

Year	No. of times schedules were changed	
	Indian Airlines	Vayudoot
1988-89 . .	34	4
1989-90 . . .	61	19
1990-91 . . .	54	5